

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of dynamically setting a rise-over-thermal (ROT) threshold in a communication system, the method comprising:

determining whether an outage of communication has occurred, wherein the step of determining whether the outage of communication has occurred comprises:

determining which one of a plurality of access terminals is transmitting data to a base transceiver station at a lowest data rate;

determining whether a set of data received from the access terminal transmitting at the lowest data rate has an error; and

setting a warning flag for the access terminal transmitting at the lowest data rate has an error;

increasing the ROT threshold by a predetermined increment if the outage has not occurred; and

decreasing the ROT threshold by a predetermined decrement if the outage has occurred.

2. (Original) The method of claim 1, further comprising setting a reverse activity bit (RAB) to 1 if the outage has occurred.

3. (Original) The method of claim 1, further comprising initially setting the ROT threshold to a predetermined minimum ROT threshold.

4-5. (Cancelled)

6. (Currently Amended) The method of claim 1 [[5]], wherein the step of determining whether the outage of communication has occurred further comprises:

determining whether a second set of data received from the access terminal transmitting at the lowest data rate has an error; and

declaring the outage for the access terminal transmitting at the lowest data rate has an error.

7. (Original) The method of claim 6, wherein the step of determining whether the outage of communication has occurred further comprises eliminating the warning flag for the

access terminal transmitting at the lowest data rate if the second set of data received from the access terminal transmitting at the lowest data rate does not have an error.

8. (Currently Amended) The method of claim 1 [[5]], wherein the step of determining whether the set of data received from the access terminal transmitting at the lowest data rate has an error comprises determining whether a packet received from the access terminal transmitting at the lowest data rate has a frame error.

9. (Original) The method of claim 8, wherein the step of determining whether the outage of communication has occurred further comprises declaring the outage for the access terminal transmitting at the lowest data rate if two consecutive packets received from the access terminal transmitting at the lowest data rate have frame errors.

10. (Currently Amended) The method of claim 1 [[5]], further comprising determining whether an outage has occurred at another one of the access terminals.

11. (Currently Amended) The method of claim 1 [[5]], further comprising: determining the number of access terminals with warning flags in a given sector communicating with the base transceiver station; and
declaring an outage for the sector if the number of access terminals with the warning flags exceeds a predetermined number.

12. (Currently Amended) An apparatus, comprising:
means for determining whether an outage of communication has occurred at one of the access terminals, wherein the means for determining whether the outage of communication has occurred comprises:

means for determining which one of the access terminals is transmitting data at a lowest data rate;

means for determining whether a set of data received from the access terminal transmitting at the lowest data rate has an error; and

means for setting a warning flag for the access terminal transmitting at the lowest data rate if the set of data received from the access terminal transmitting at the lowest data rate has an error;

means for increasing a rise-over-thermal (ROT) threshold by a predetermined increment if the outage has not occurred; and

means for decreasing the ROT threshold by a predetermined decrement if the outage has occurred.

13. (Cancelled)

14. (Previously Presented) The apparatus of claim 12, further comprising means for setting a reverse activity bit (RAB) to 1 if the outage has occurred.

15. (Previously Presented) The apparatus of claim 12, wherein the means for dynamically setting the ROT threshold further comprises means for initially setting the ROT threshold to a predetermined minimum ROT threshold.

16-17. (Cancelled)

18. (Currently Amended) The apparatus of claim 12 [[17]], wherein the means for determining whether the outage of communication has occurred further comprises:

means for determining whether a second set of data received from the access terminal transmitting at the lowest data rate has an error; and

means for declaring the outage for the access terminal transmitting at the lowest data rate if the second set of data received from the access terminal transmitting at the lowest data rate has an error.

19. (Original) The apparatus of claim 18, wherein the means for determining whether the outage of communication has occurred further comprises means for eliminating the warning flag for the access terminal transmitting at the lowest data rate if the second set of data received from the access terminal transmitting at the lowest data rate does not have an error.

20. (Currently Amended) The apparatus of claim 12 [[17]], wherein the means for determining whether the set of data received from the access terminal transmitting at the lowest data rate has an error comprises means for determining whether a packet received from the access terminal transmitting at the lowest data rate has a frame error.

21. (Original) The apparatus of claim 20, wherein the means for determining whether the outage of communication has occurred further comprises means for declaring the outage for the access terminal transmitting at the lowest data rate if two consecutive packets received from the access terminal transmitting at the lowest data rate have frame errors.

22. (Previously Presented) The apparatus of claim 12, wherein the means for dynamically setting the ROT threshold further comprises:

means for determining whether an outage has occurred at another one of the access terminals.

23. (Previously Presented) The apparatus of claim 12, wherein the means for dynamically setting the ROT threshold further comprises:

means for determining the number of access terminals with warning flags in a given sector; and

means for declaring an outage for the sector if the number of access terminals with the warning flags exceeds a predetermined number.

24. (Currently Amended) A computer program product comprising:
a computer readable medium for dynamically setting a rise-over-thermal (ROT) threshold in a communication system, comprising:

instructions for determining whether an outage of communication has occurred by:

determining which one of a plurality of access terminals is transmitting data to a base transceiver station at a lowest data rate;

determining whether a set of data received from the access terminal transmitting at the lowest data rate has an error; and

setting a warning flag for the access terminal transmitting at the lowest data rate has an error;

instructions for increasing the ROT threshold by a predetermined increment if the outage has not occurred;

instructions for decreasing the ROT threshold by a predetermined decrement if the outage has occurred.

25-34. (Cancelled)

35. (Currently Amended) A base transceiver station having at least one input and at least one output comprising:

a transceiver having at least one input and at least one output;

a rise-over-thermal threshold processor having at least one input and at least one output, wherein said at least one input is connected to said at least one output of said transceiver and said at least one output is connected to said at least one output of said base transceiver station; and

at least one antenna having at least one input and at least one output, wherein said at least one output is connected to said at least one input of said transceiver and said one input is

connected to said at least one input of said base transceiver station, wherein said rise-over-thermal threshold processor:

determines whether an outage of communication has occurred at one of said access terminals, by:

determining which one of said access terminals is transmitting data at a lowest data rate;

determining whether a set of data received from said access terminal transmitting at said lowest data rate has an error; and

setting a warning flag for the access terminal transmitting at the lowest data rate if the set of data received from said access terminal transmitting at the lowest data rate has an error;

increases said rise-over-thermal threshold by a predetermined increment if said outage has not occurred; and

decreases said rise-over-thermal threshold by a predetermined amount if said outage has occurred.

36. (Previously Presented) The base transceiver station, according to claim 35, wherein said transceiver receives data in a plurality of packets from a plurality of access terminals and said rise-over-thermal threshold processor dynamically sets a rise-over-thermal threshold for said access terminals.

37. (Cancelled)

38. (Previously Presented) The base transceiver station according to claim 35, wherein said rise-over-thermal threshold processor sets a reverse activity bit to 1 if said outage has occurred.

39. (Previously Presented) The base transceiver station according to claim 35, wherein said rise-over-thermal threshold processor initially sets the rise-over-thermal threshold to a predetermined minimum rise-over-thermal threshold.

40-41. (Cancelled)

42. (Currently Amended) The base transceiver station of claim 35 [[41]], wherein said rise-over-thermal threshold processor:

determines whether a second set of data received from said access terminal transmitting at said lowest data rate has an error; and

declares said outage for said access terminal transmitting at said lowest data rate if said second set of data received from said access terminal transmitting at said lowest data rate has an error.

43. (Previously Presented) The base transceiver station of claim 42, wherein said rise-over-thermal threshold processor eliminates said warning flag for said access terminal transmitting at said lowest data rate if said second set of data received from said access terminal transmitting at said lowest data rate does not have an error.

44. (Currently Amended) The base transceiver station of claim 35 [[41]], wherein said rise-over-thermal threshold processor determines whether a packet received from said access terminal transmitting at said lowest data rate has a frame error.

45. (Previously Presented) The base transceiver station of claim 44, wherein said rise-over-thermal threshold processor declares said outage for said access terminal transmitting at said lowest data rate if two consecutive packets received from said access terminal transmitting at said lowest data rate have frame errors.

46. (Previously Presented) The base transceiver station of claim 36, wherein said rise-over-thermal threshold processor determines whether an outage has occurred at another one of said access terminals.

47. (Previously Presented) The base transceiver station of claim 36, wherein said rise-over-thermal threshold processor:

determines said number of access terminals with warning flags in a given sector; and
declares an outage for said sector if said number of access terminals with said warning flags exceeds a predetermined number.

48. (Cancelled)

49. (New) A method of dynamically setting a rise-over-thermal (ROT) threshold in a communication system, the method comprising:

determining whether an outage of communication has occurred;
determining whether the ROT threshold is equal to a predetermined maximum threshold;
maintaining the ROT threshold at the predetermined maximum threshold if the ROT threshold is equal to the predetermined maximum threshold and the outage has not occurred;
increasing the ROT threshold by a predetermined increment if the outage has not occurred; and

decreasing the ROT threshold by a predetermined decrement if the outage has occurred.

50. (New) An apparatus comprising:

means for determining whether an outage of communication has occurred;

means for determining whether the ROT threshold is equal to a predetermined maximum threshold;

means for maintaining the ROT threshold at the predetermined maximum threshold if the ROT threshold is equal to the predetermined maximum threshold and the outage has not occurred;

means for increasing the ROT threshold by a predetermined increment if the outage has not occurred; and

means for decreasing the ROT threshold by a predetermined decrement if the outage has occurred.

51. (New) A base transceiver station having at least one input and at least one output comprising:

a transceiver having at least one input and at least one output;

a rise-over-thermal threshold processor having at least one input and at least one output, wherein said at least one input is connected to said at least one output of said transceiver and said at least one output is connected to said at least one output of said base transceiver station; and

at least one antenna having at least one input and at least one output, wherein said at least one output is connected to said at least one input of said transceiver and said one input is connected to said at least one input of said base transceiver station, wherein said rise-over-thermal threshold processor:

determines whether an outage of communication has occurred;

determines whether the ROT threshold is equal to a predetermined maximum threshold;

maintains the ROT threshold at the predetermined maximum threshold if the ROT threshold is equal to the predetermined maximum threshold and the outage has not occurred;

increases the ROT threshold by a predetermined increment if the outage has not occurred; and

decreases the ROT threshold by a predetermined decrement if the outage has occurred.

52. (New) A computer program product comprising:

a computer readable medium for dynamically setting a rise-over-thermal (ROT) threshold in a communication system, comprising instructions for:

- determining whether an outage of communication has occurred;
- determining whether the ROT threshold is equal to a predetermined maximum threshold;

- maintaining the ROT threshold at the predetermined maximum threshold if the ROT threshold is equal to the predetermined maximum threshold and the outage has not occurred;

- increasing the ROT threshold by a predetermined increment if the outage has not occurred; and

- decreasing the ROT threshold by a predetermined decrement if the outage has occurred.